



Utah Water Assessment & Conditions Monitoring (Drought Webinar)

The meeting will begin shortly



Thank you to our contributors

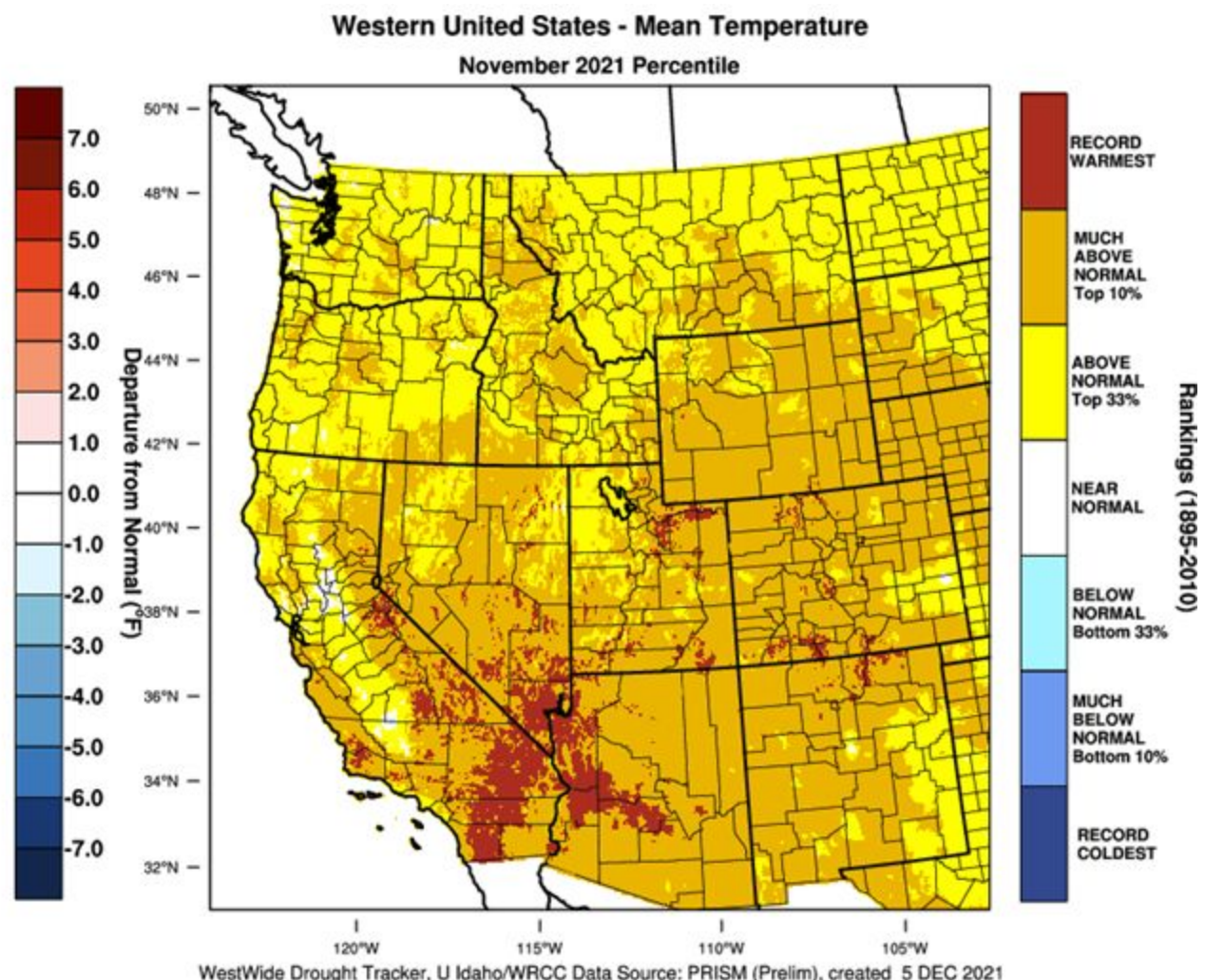
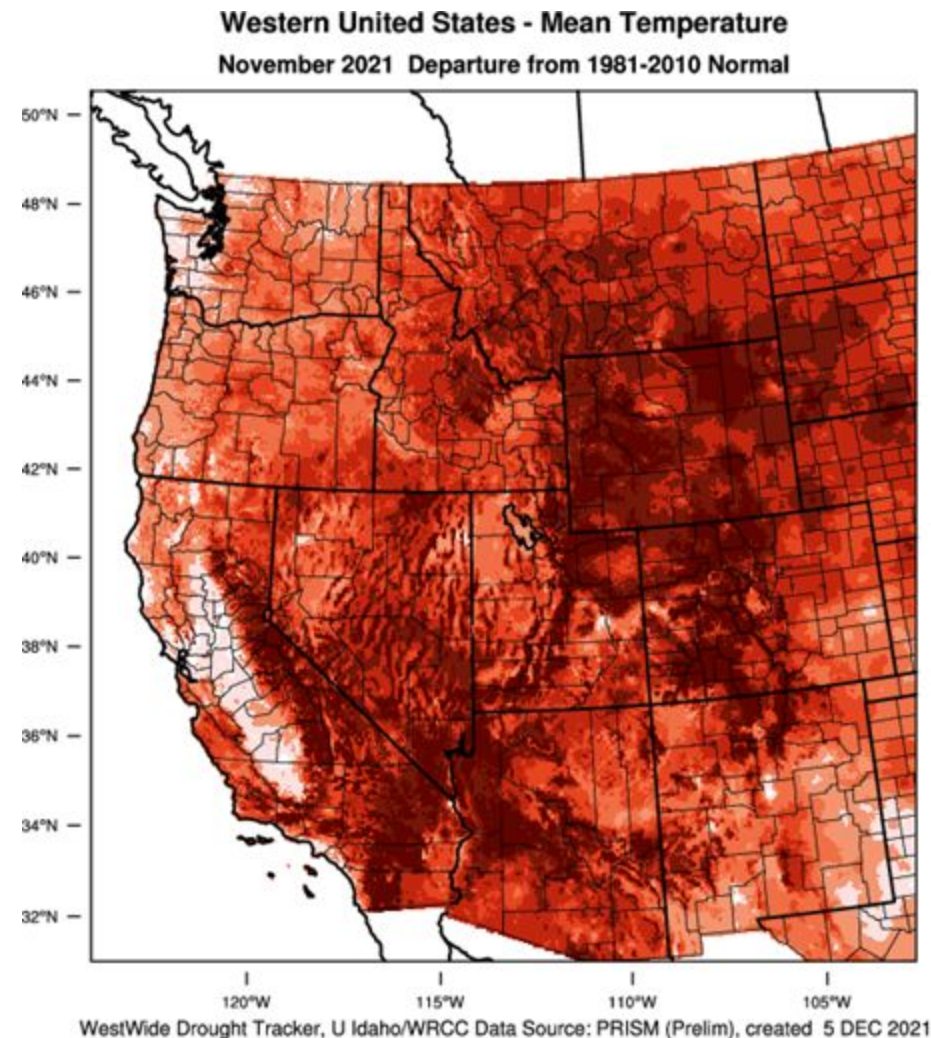




Utah Water Assessment & Conditions Monitoring Webinar

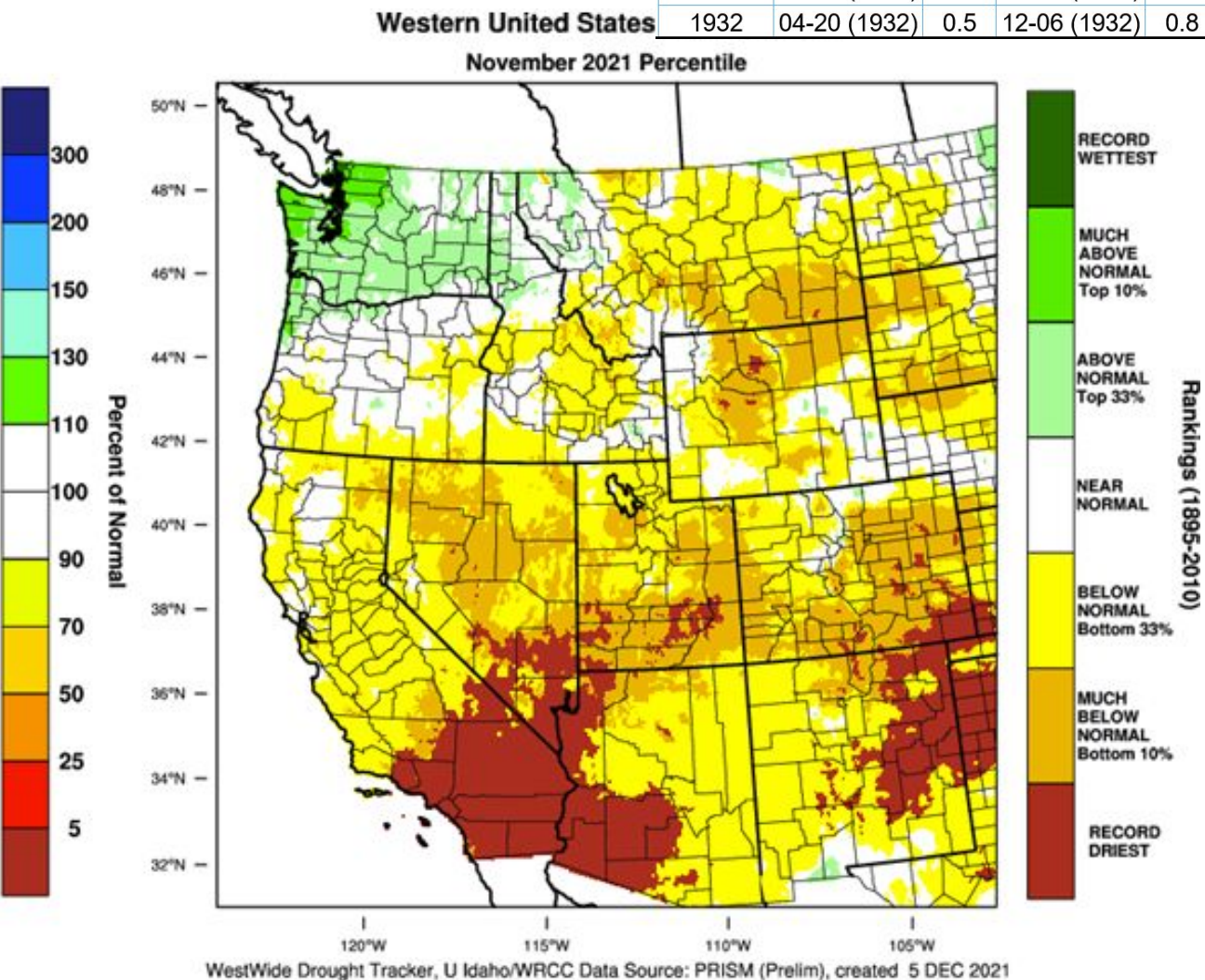
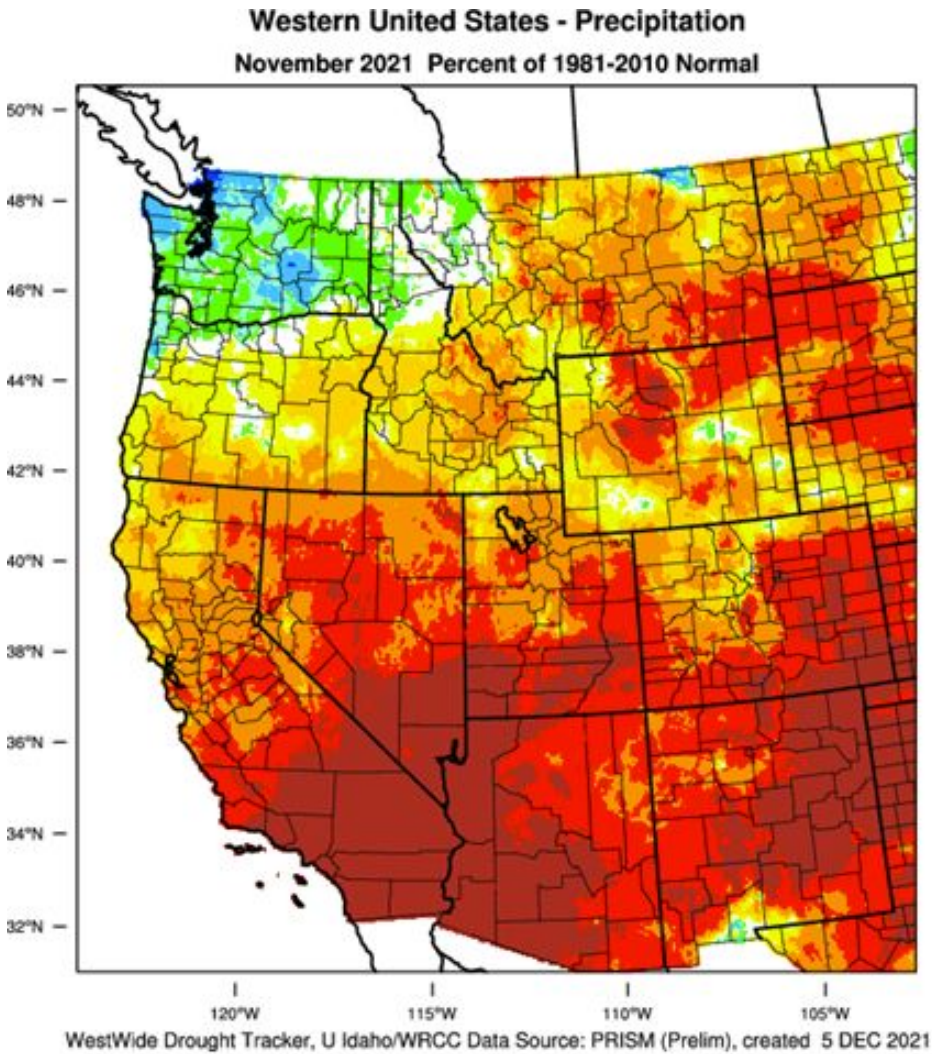
December 7, 2021

November Temperatures

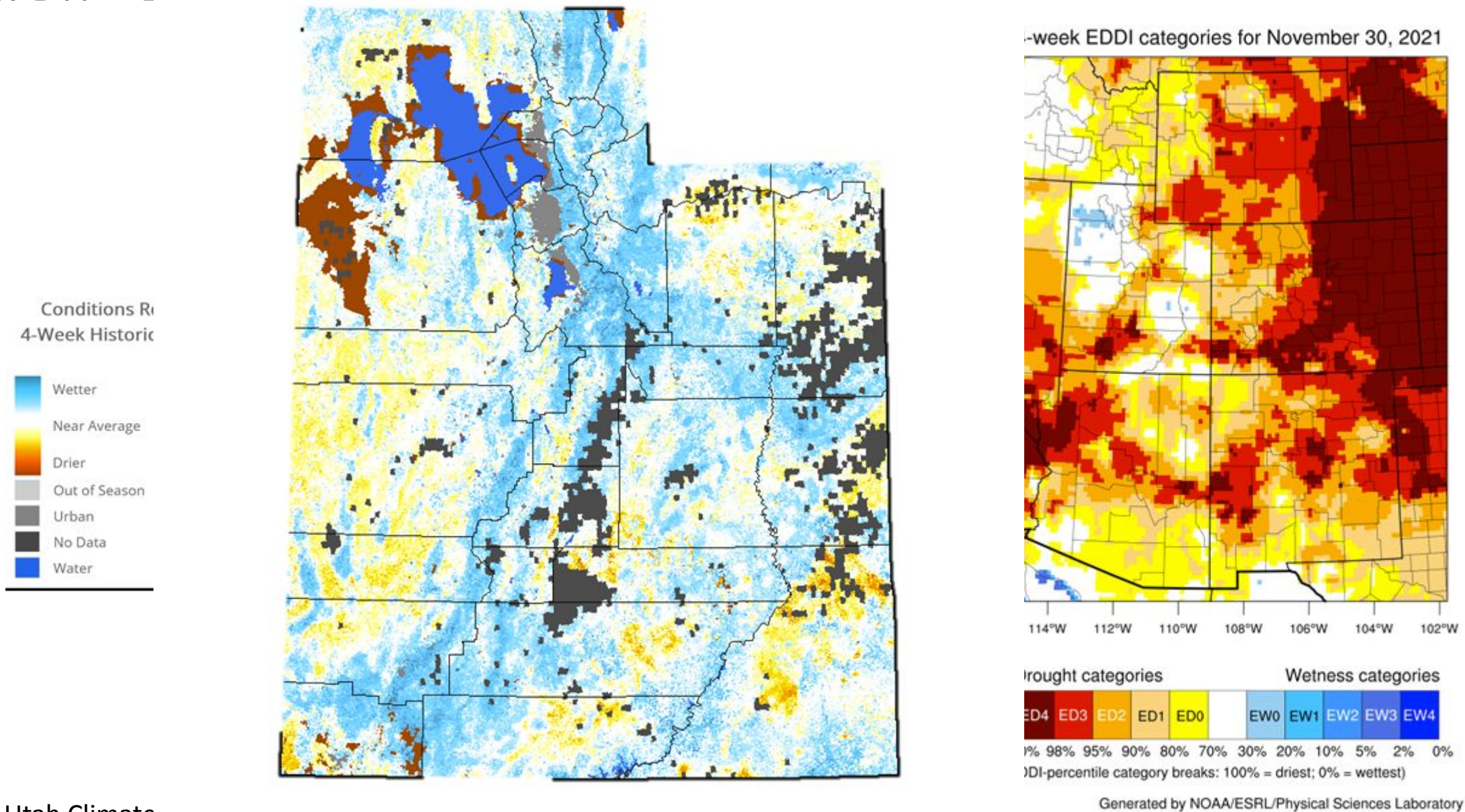


November Precipitation

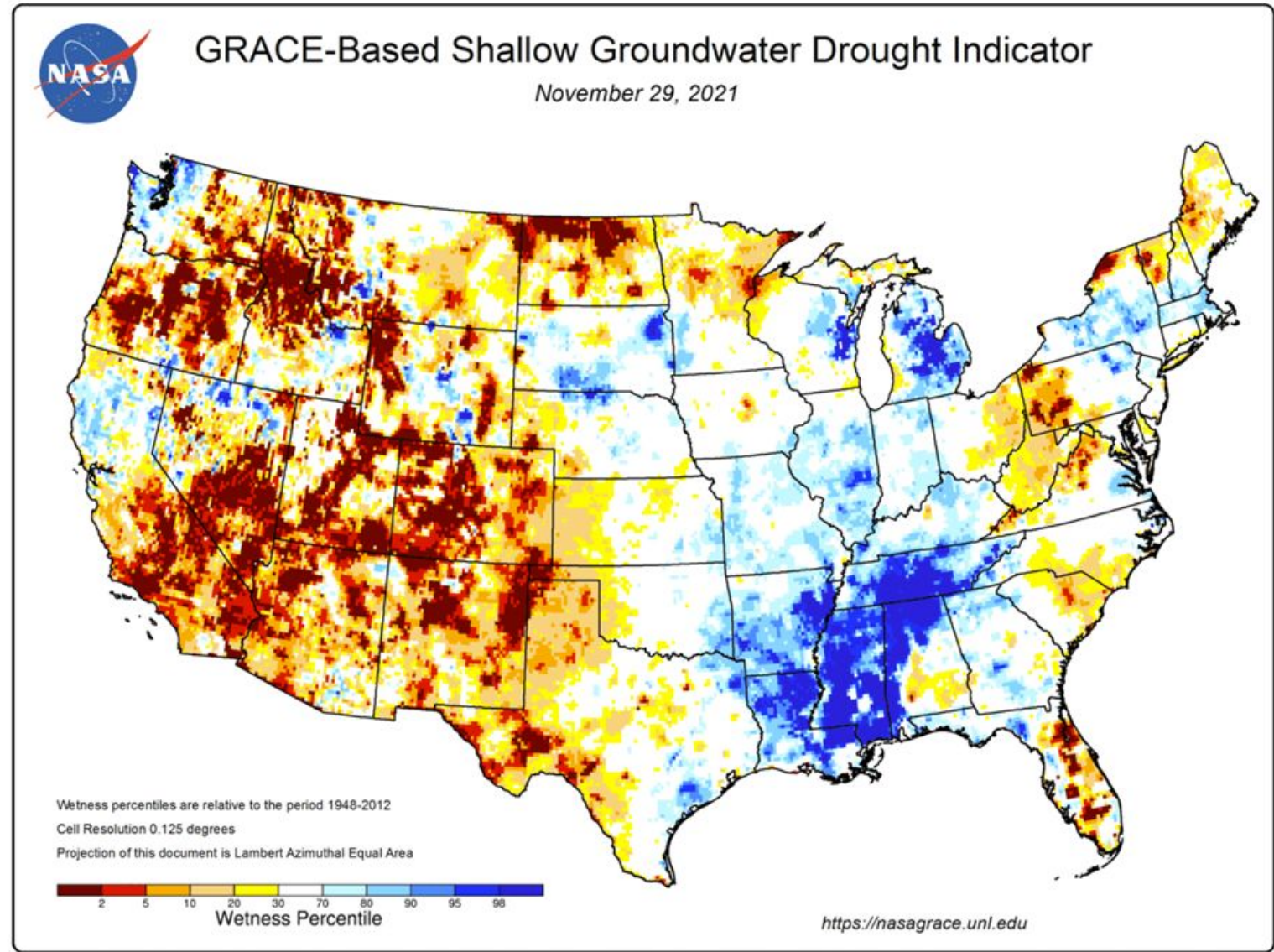
Year	Last	Value	First	Value	Difference
1943	03-20 (1943)	1.0	12-25 (1943)	5.9	279
1939	03-14 (1939)	0.2	12-25 (1939)	0.5	285
1937	05-05 (1937)	0.3	12-23 (1937)	1.0	231
1974	04-13 (1974)	1.6	12-07 (1974)	2.4	237
1932	04-20 (1932)	0.5	12-06 (1932)	0.8	229



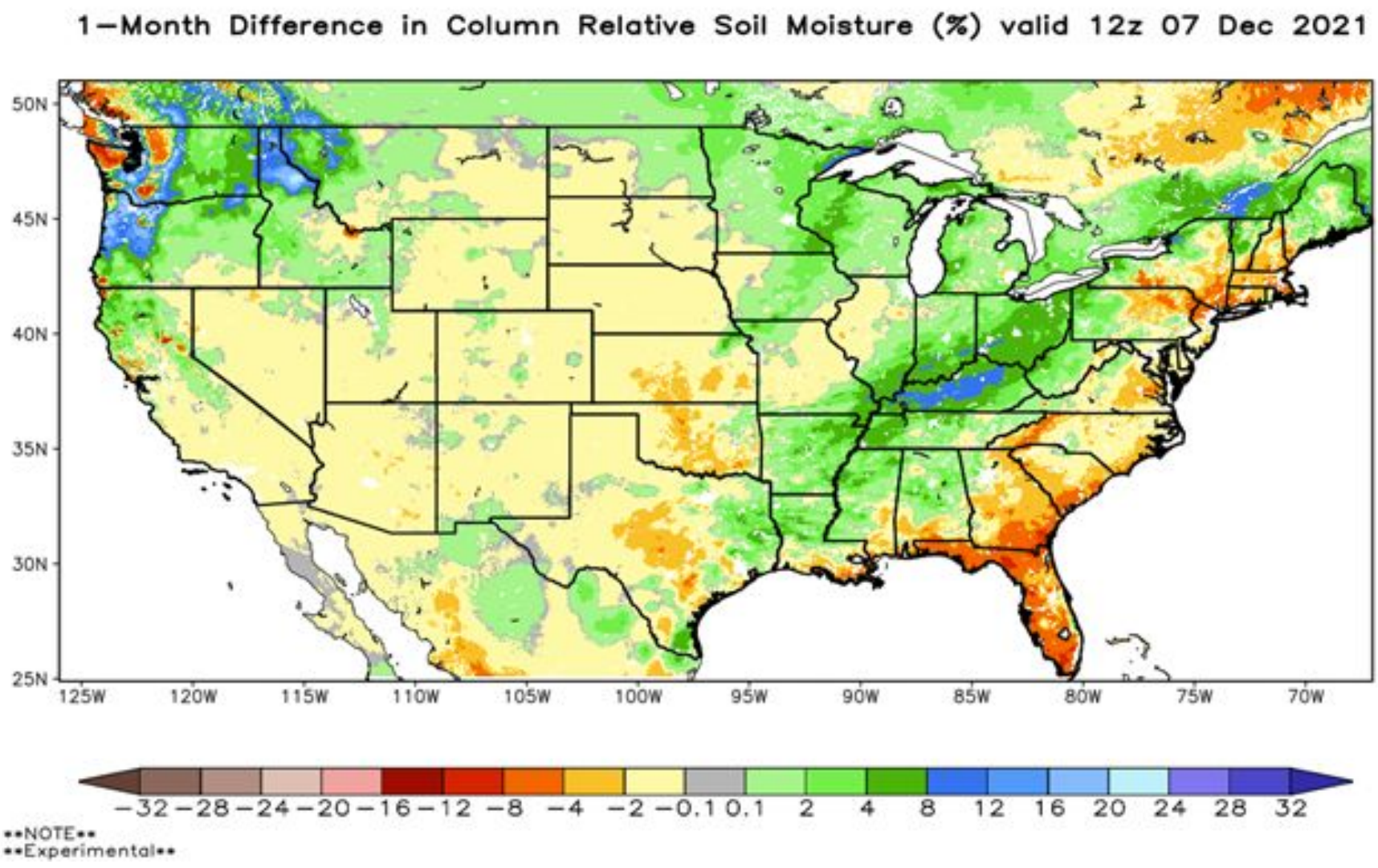
Quick-Dri + E



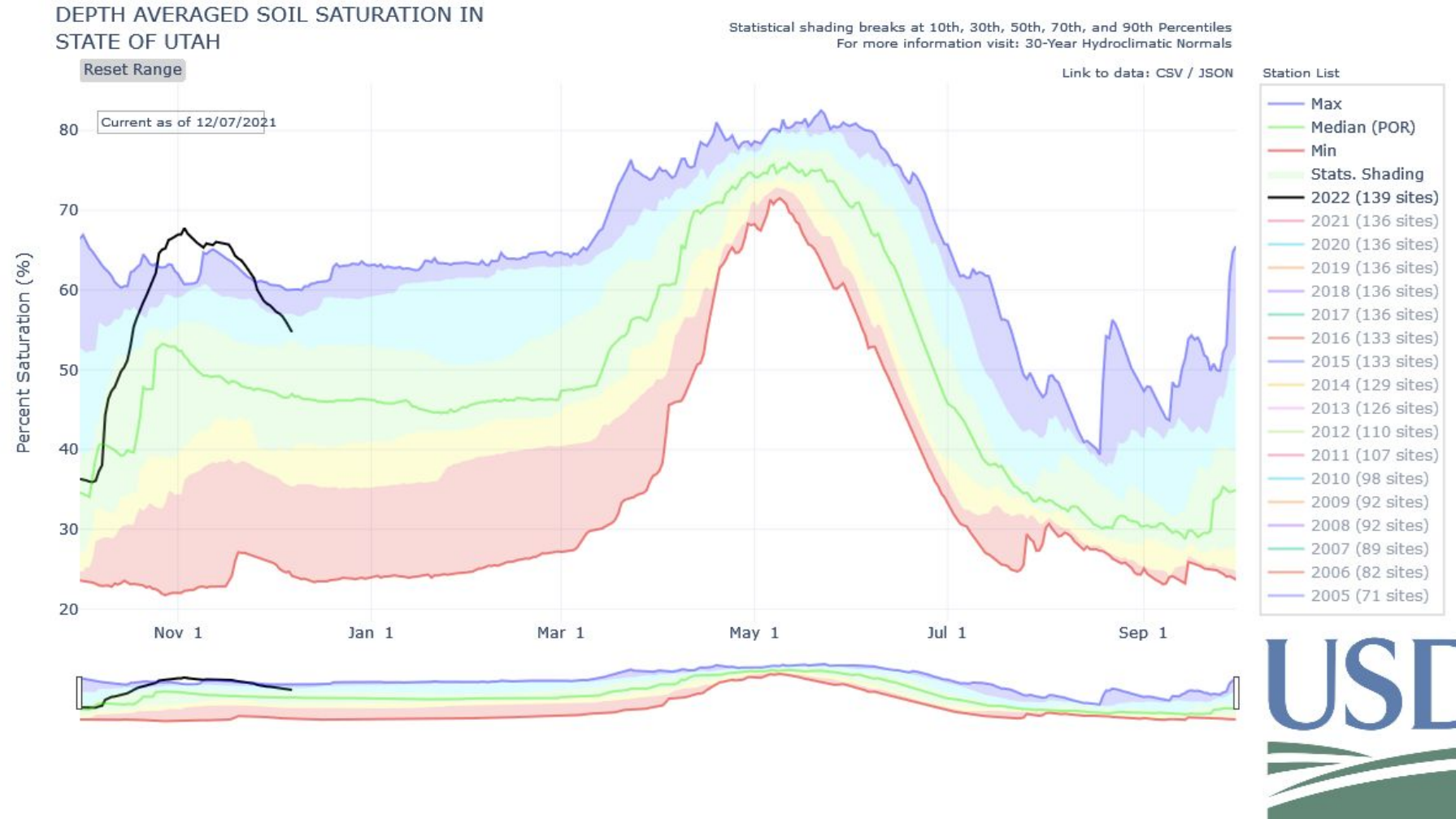
GRACE Soil moisture conditions



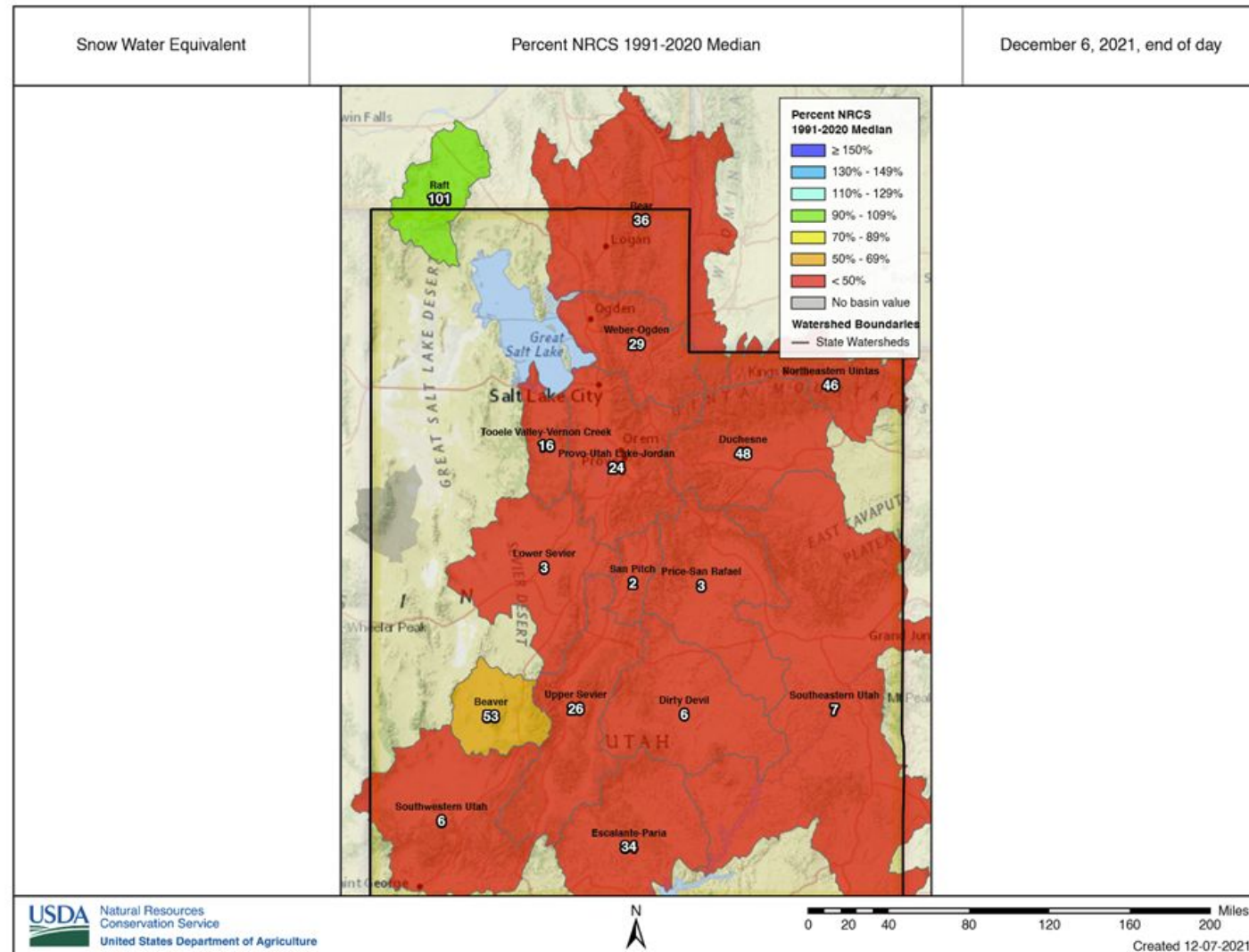
NASA SPORT Model 1-month soil moisture changes



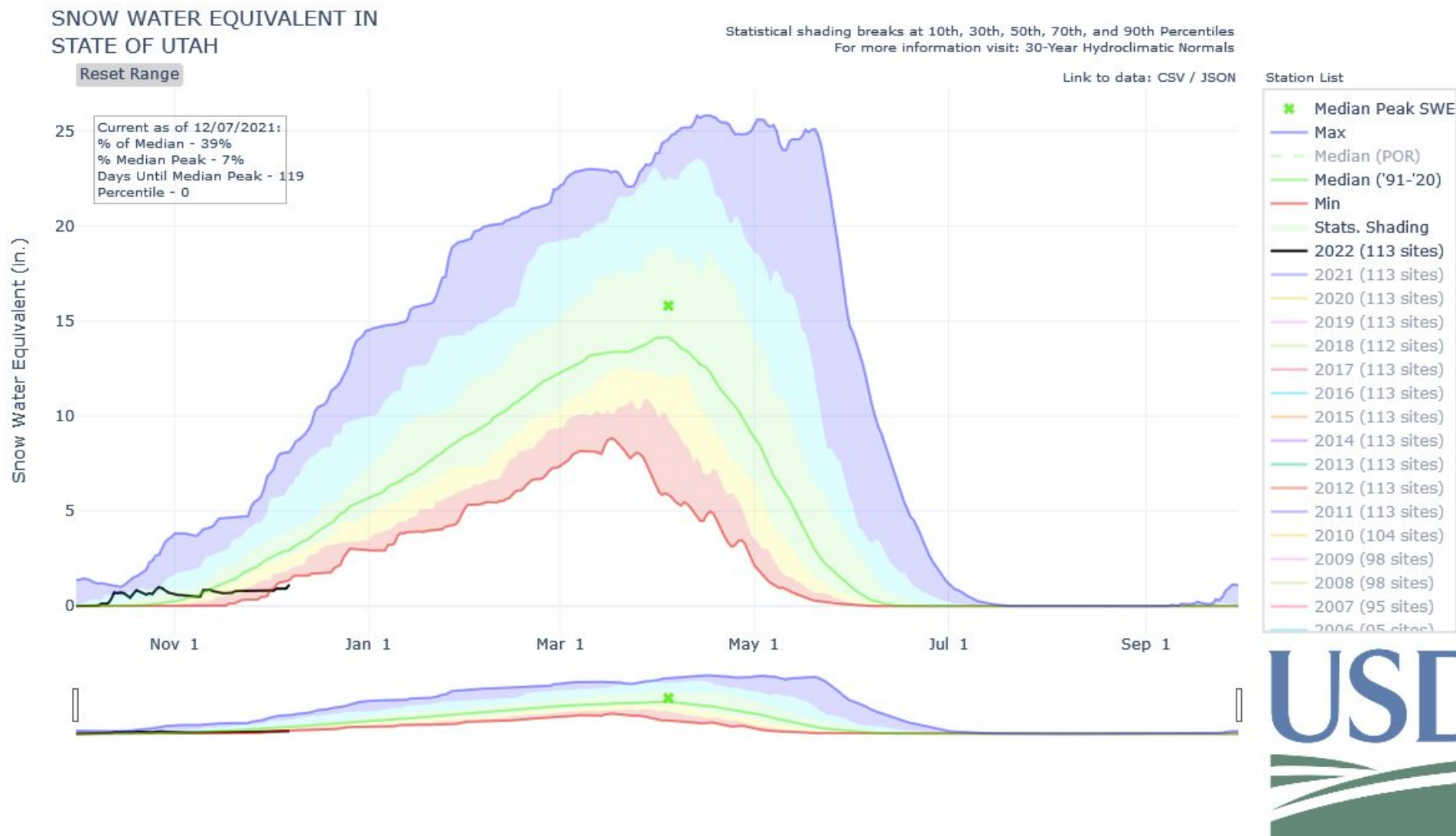
In-situ soil moisture conditions



Basin Snowpack Conditions



Snow Water Conditions



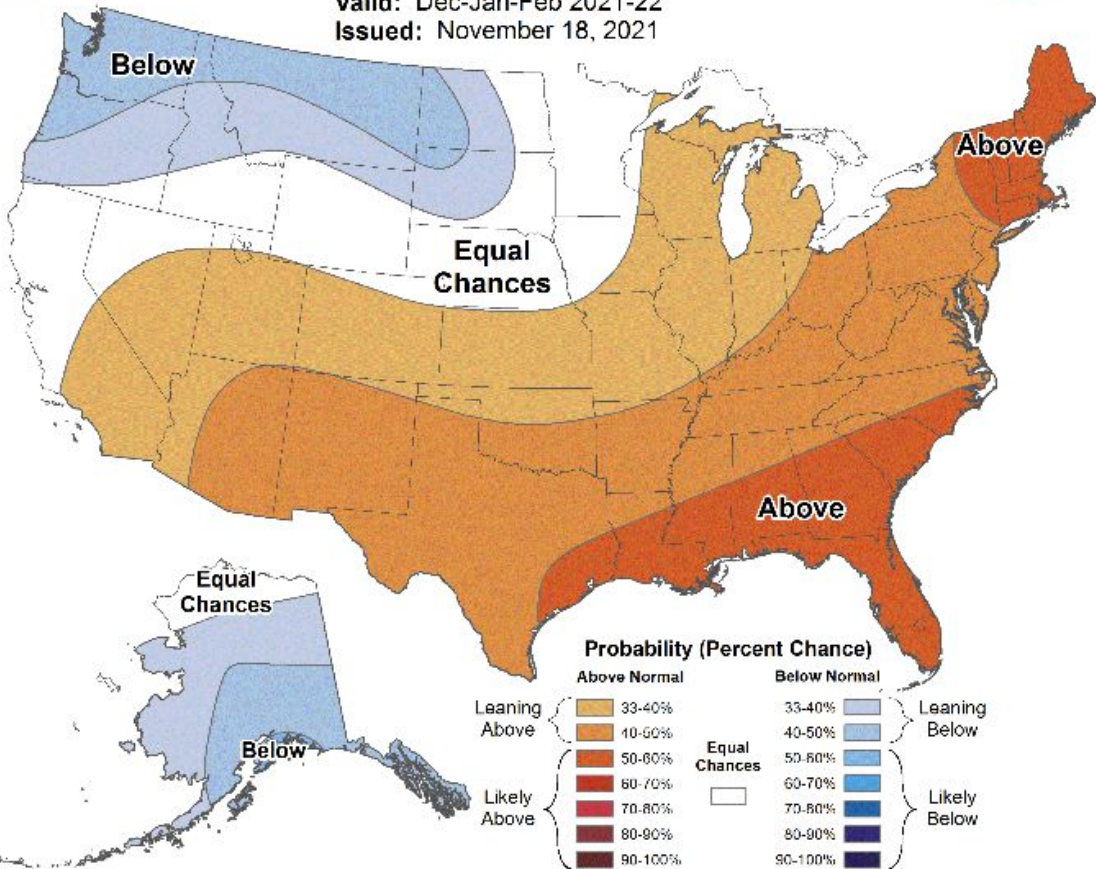
CPC 3-month Outlook



Seasonal Temperature Outlook



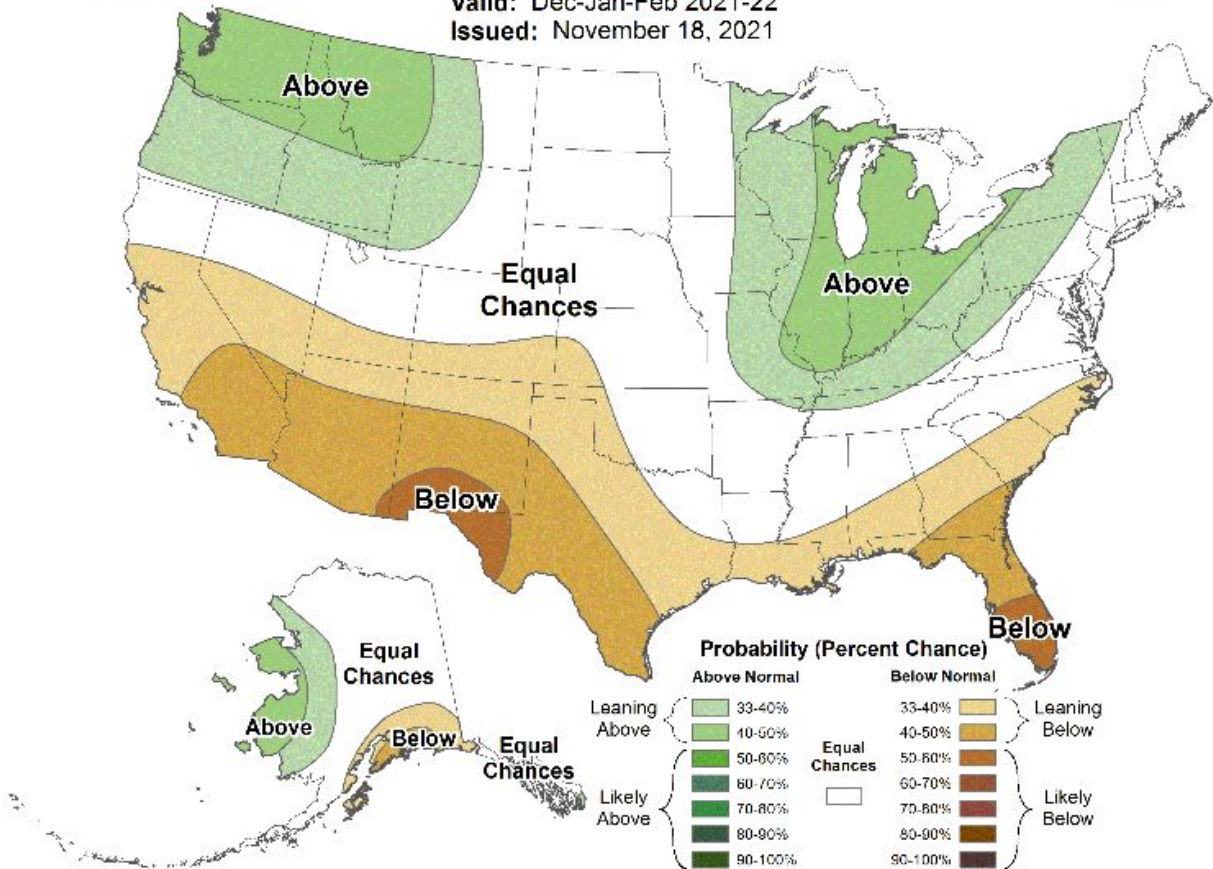
Valid: Dec-Jan-Feb 2021-22
Issued: November 18, 2021



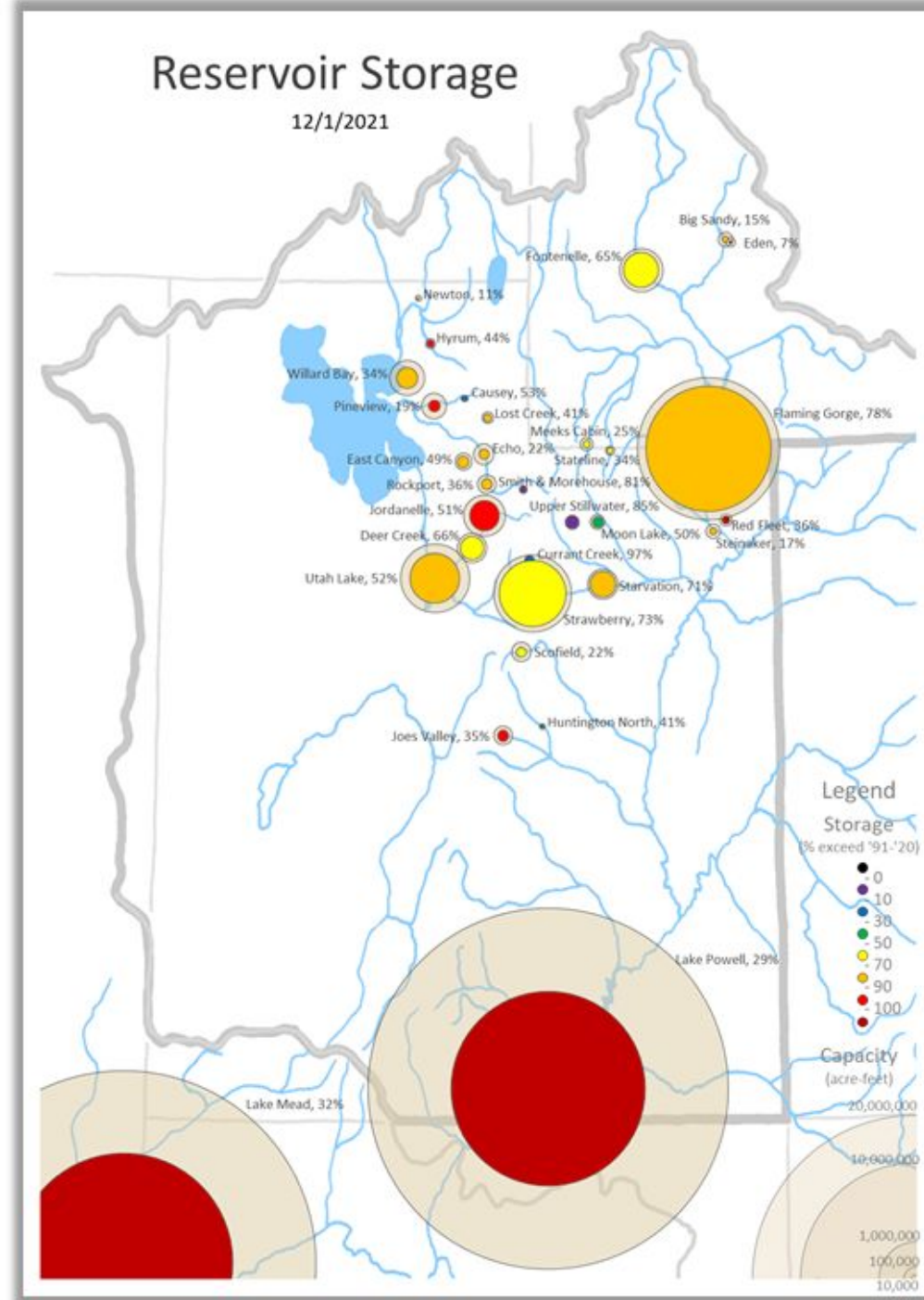
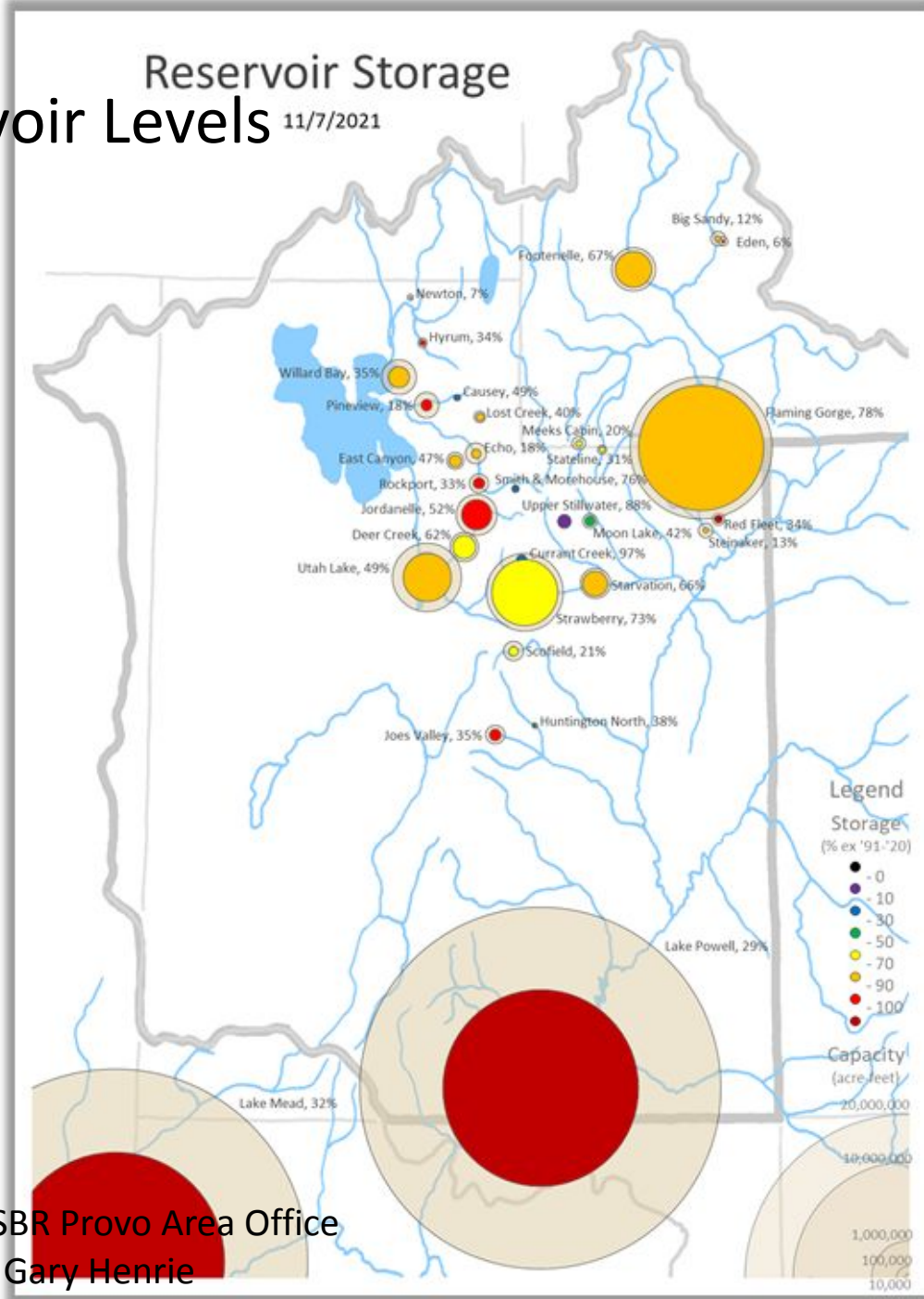
Seasonal Precipitation Outlook



Valid: Dec-Jan-Feb 2021-22
Issued: November 18, 2021



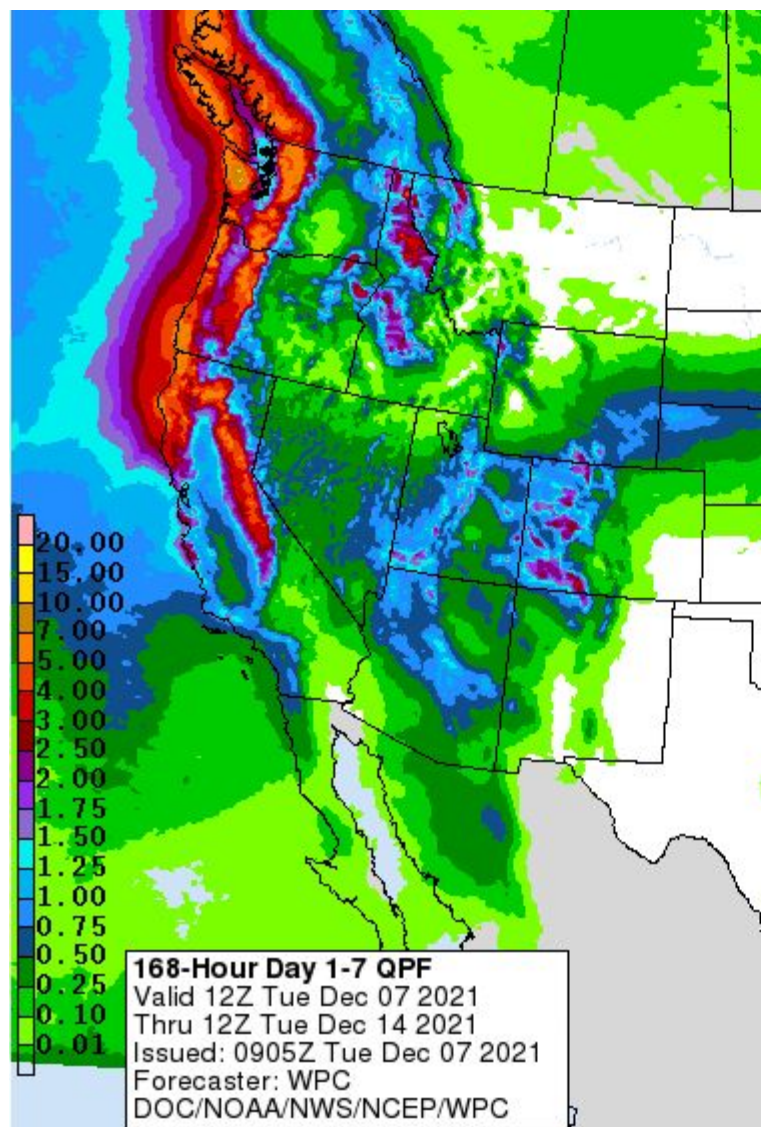
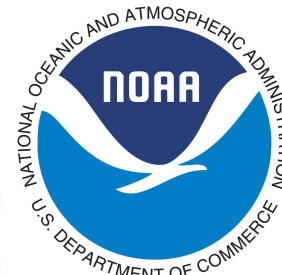
Reservoir Levels



Agency - USBR Provo Area Office
Presenter - Gary Henrie



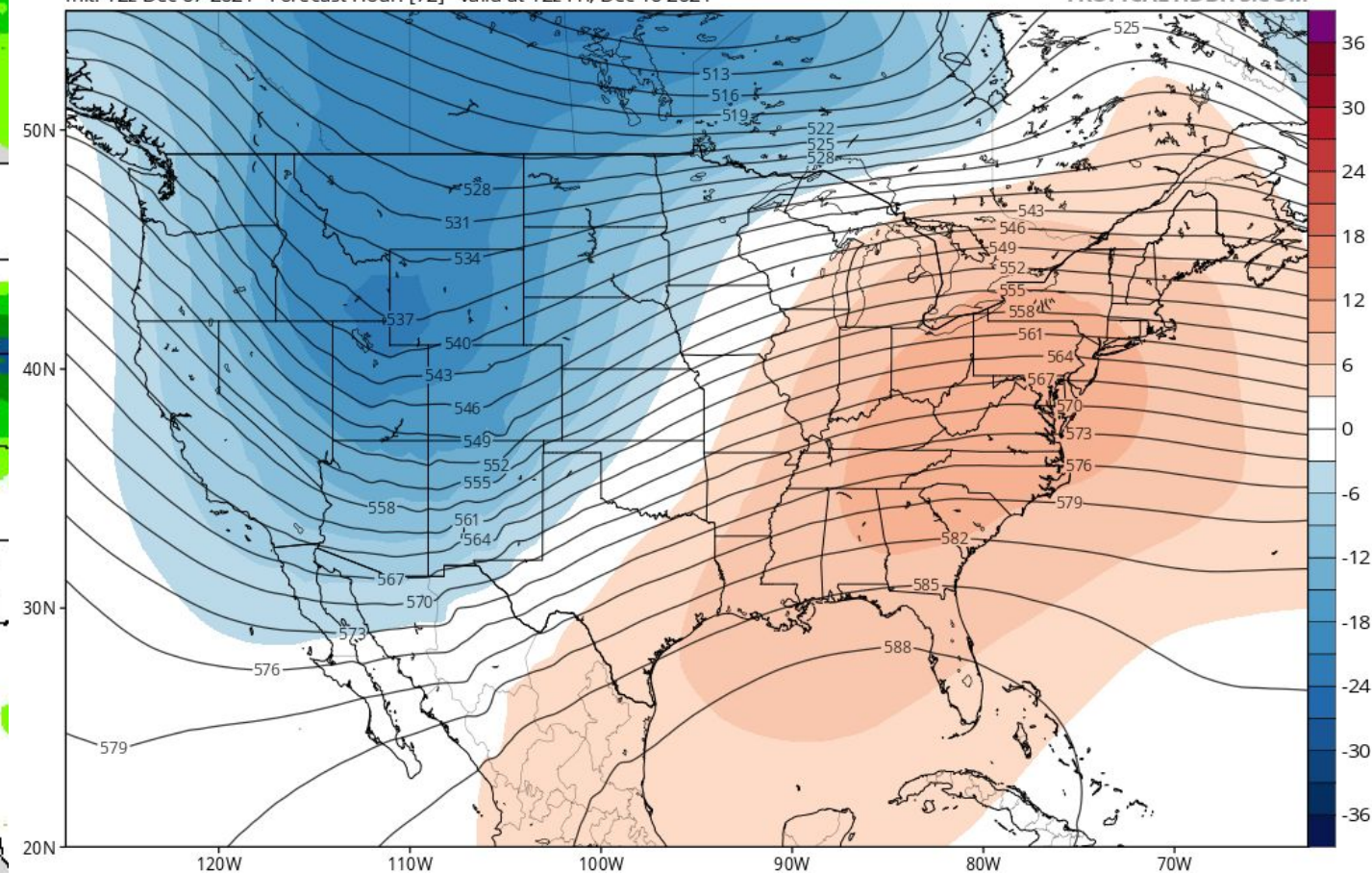
Weather Forecast Office Utah Day 1-7 Outlook



GEFS 500mb Geopotential Height & Anomaly (dam) (based on CFSR 1981-2010 Climatology)

Init: 12z Dec 07 2021 Forecast Hour: [72] valid at 12z Fri, Dec 10 2021

TROPICALTIDBITS.COM

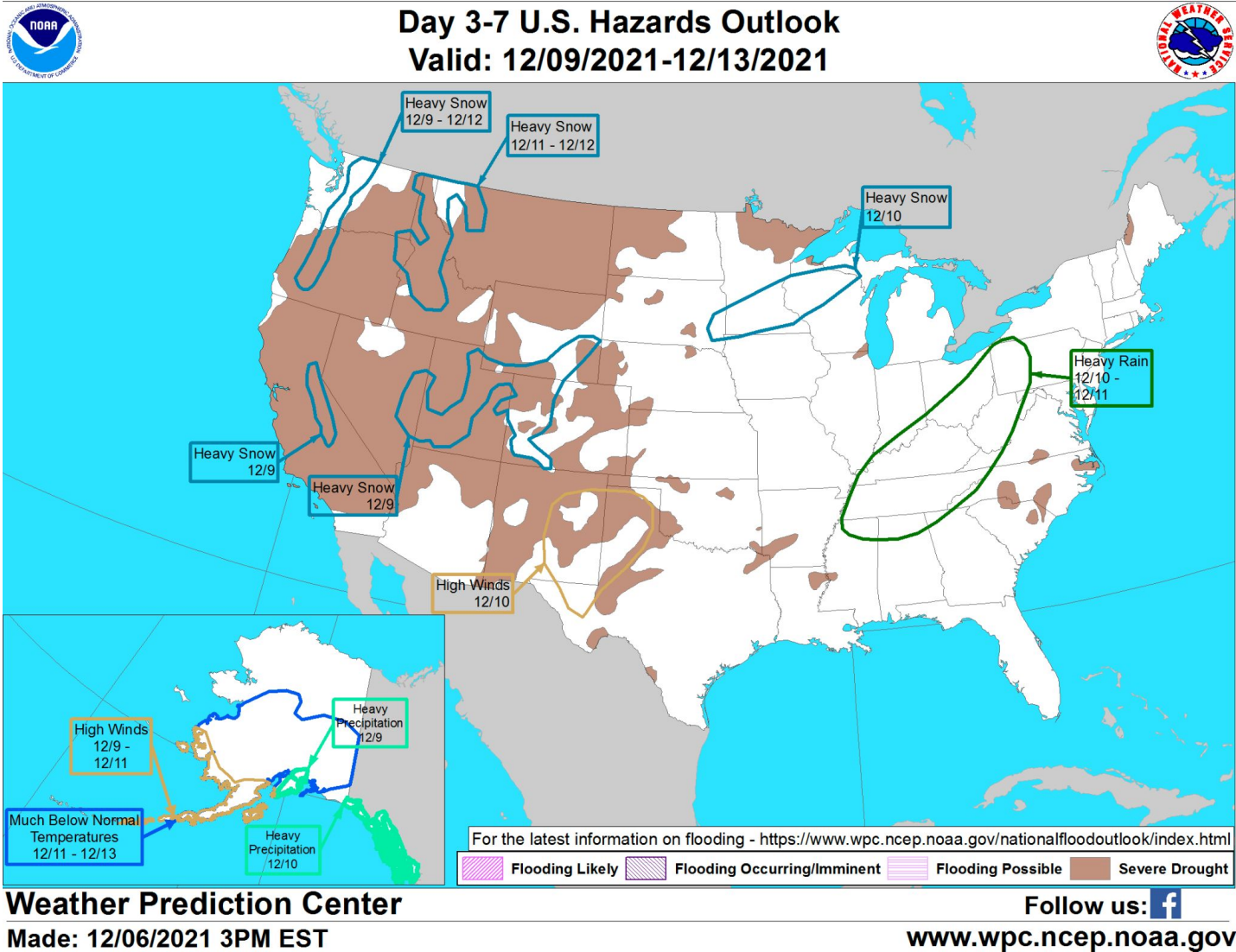
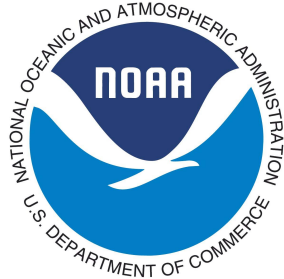


- Statewide storm Thu - Fri
- 1-2" SWE mountains, .50-.75" western valleys, less east of spine
- Beginnings of a long wave pattern change for mid December

Agency - National Weather Service Weather Forecast Office

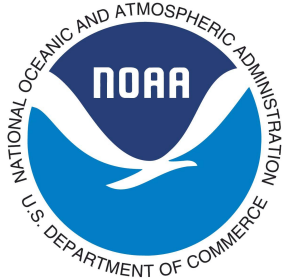
Presenter - Glen Merrill

Weather Prediction Center U.S. Day 3-7 Hazards Outlook

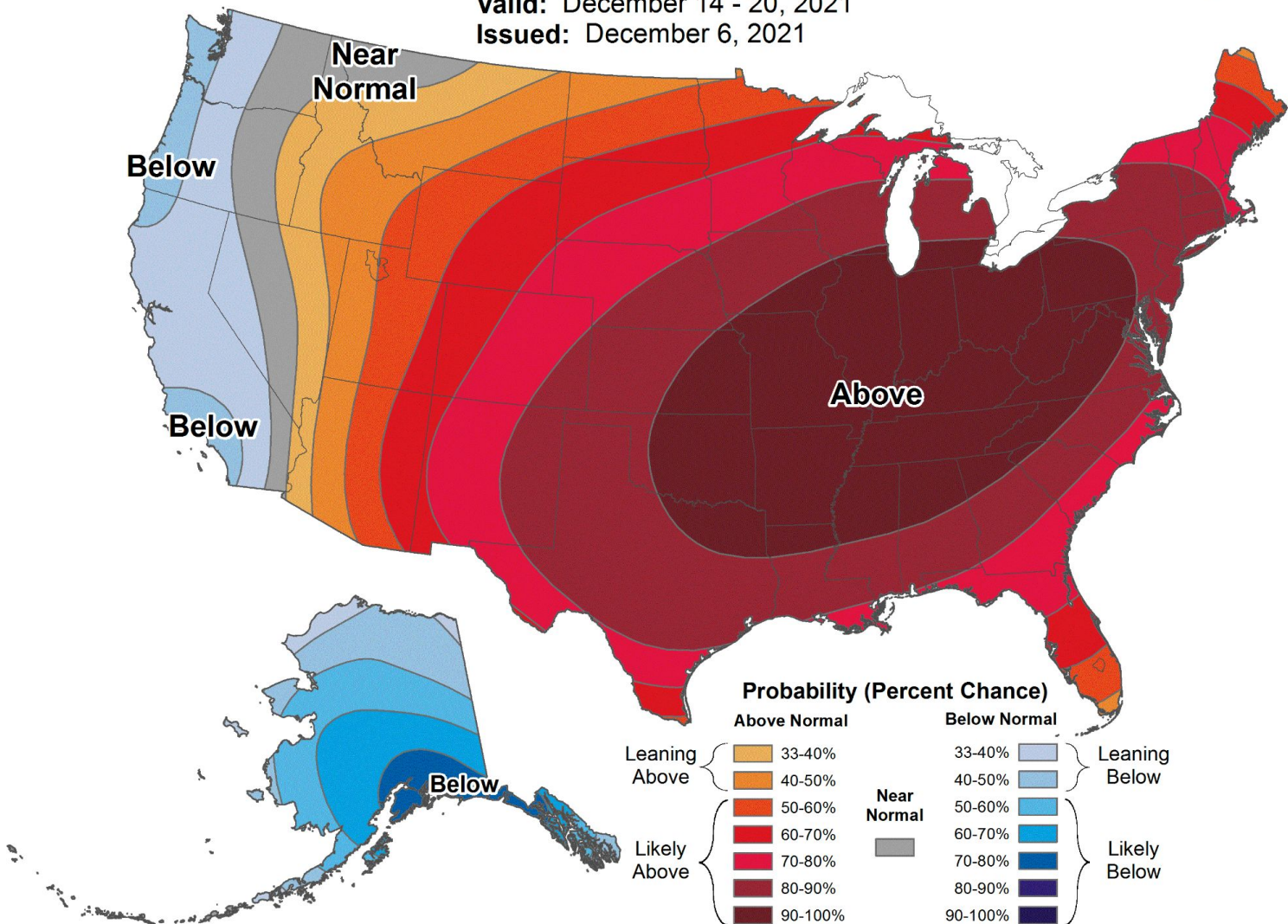


Climate Prediction Center 8 to 14 Day Outlooks - Temperature

8-14 Day Temperature Outlook



Valid: December 14 - 20, 2021
Issued: December 6, 2021



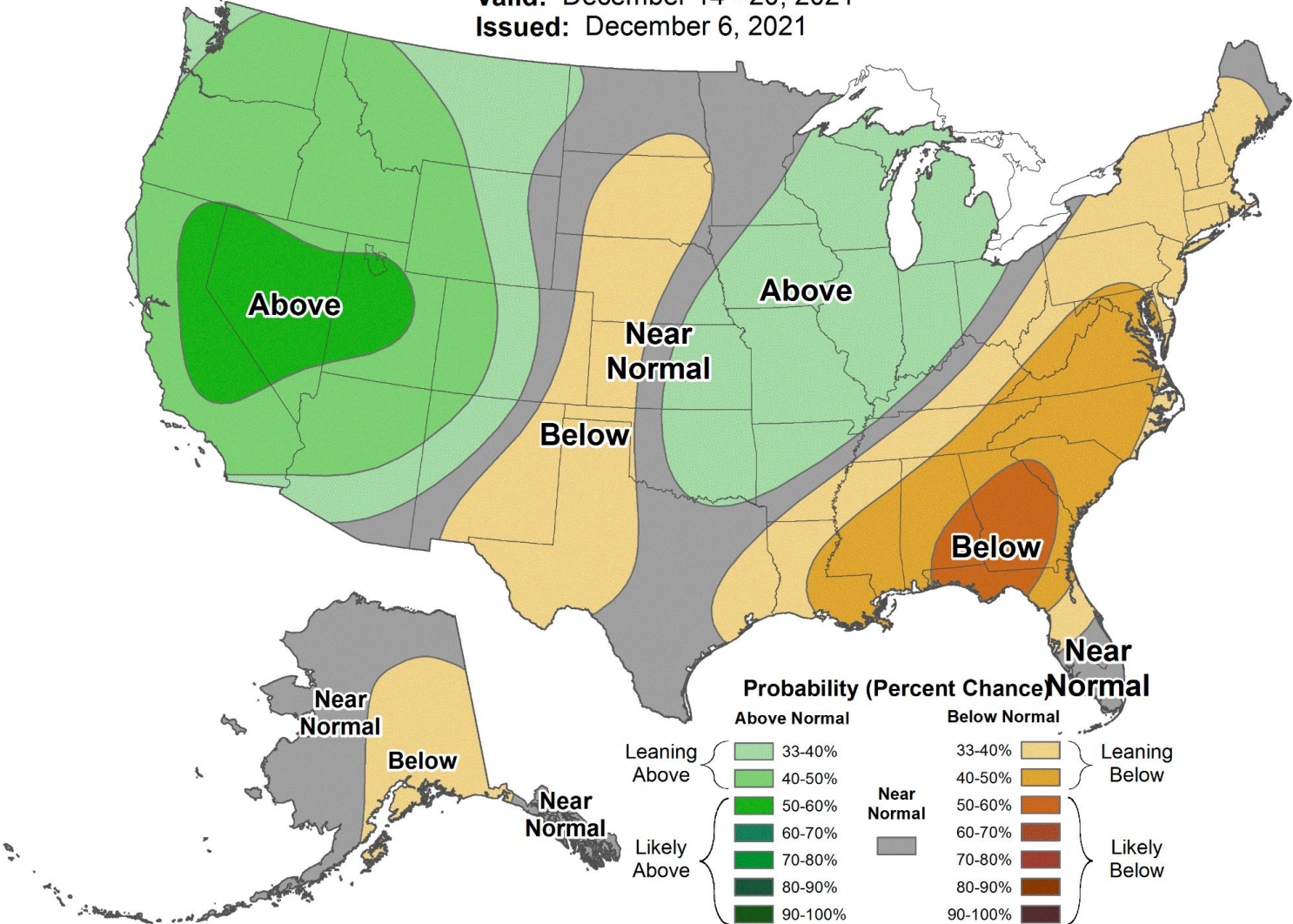
Climate Prediction Center 8 to 14 Day Outlooks - Precipitation

8-14 Day Precipitation Outlook

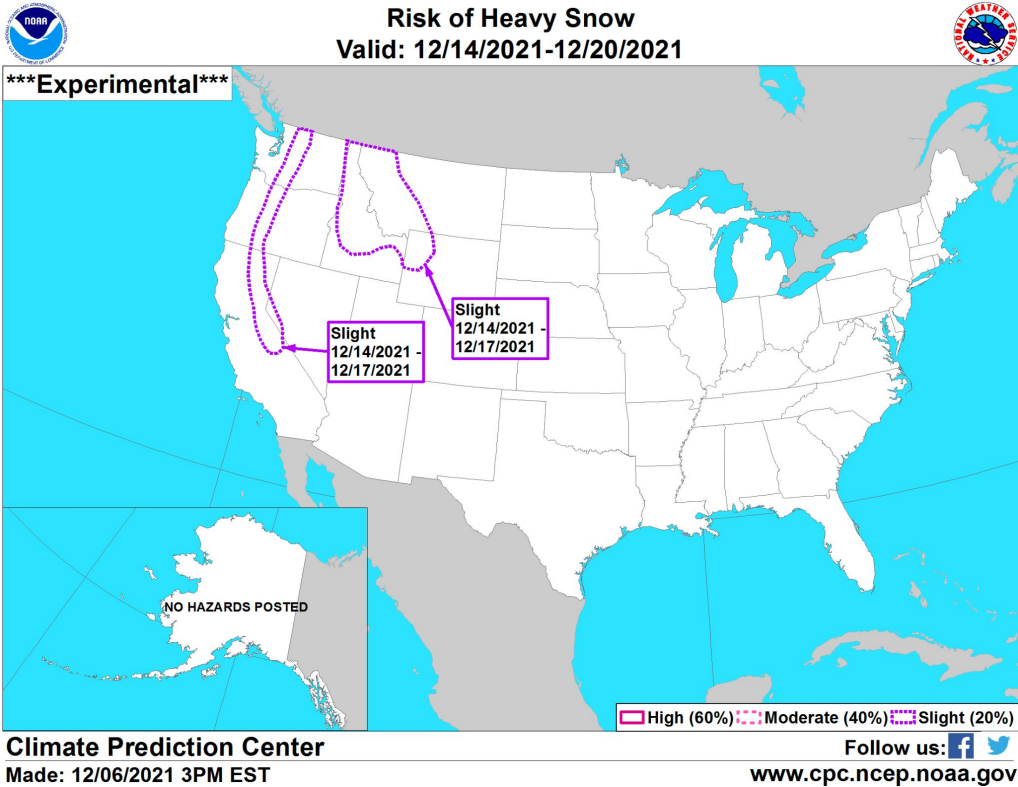
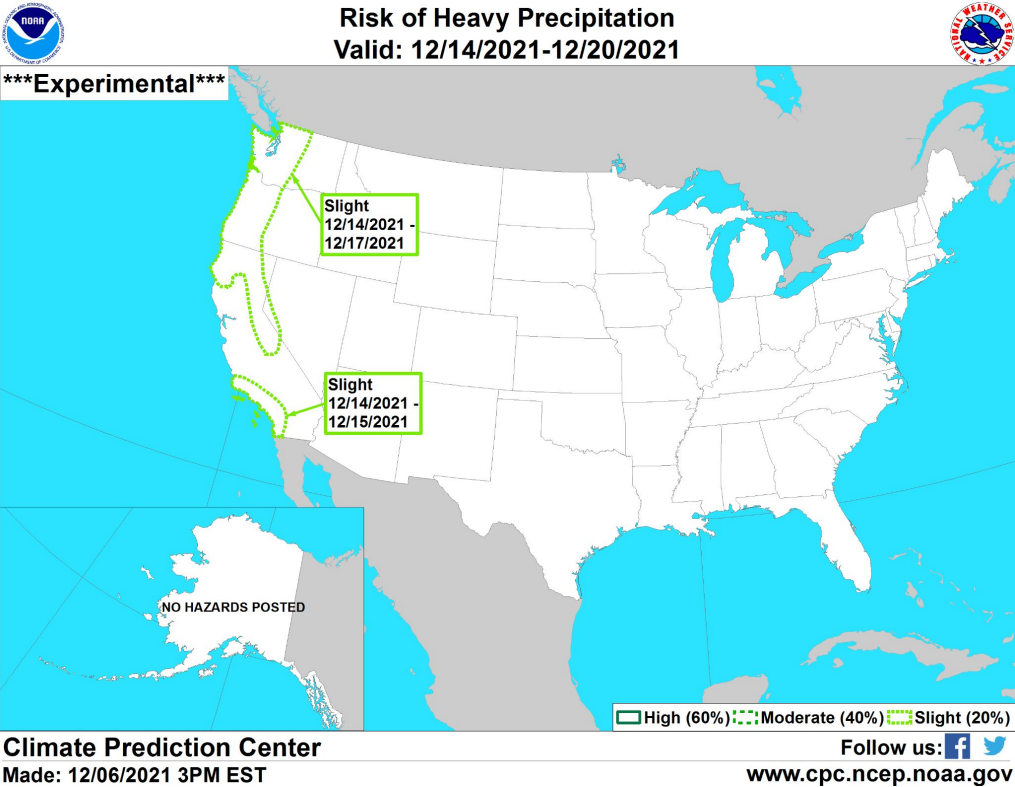
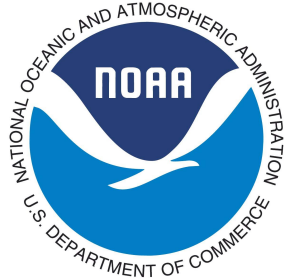


Valid: December 14 - 20, 2021

Issued: December 6, 2021

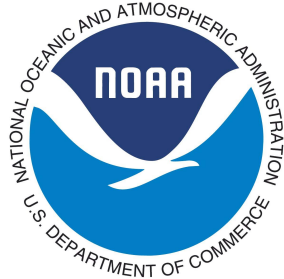


Climate Prediction Center U.S. Week-2 Hazards Outlook

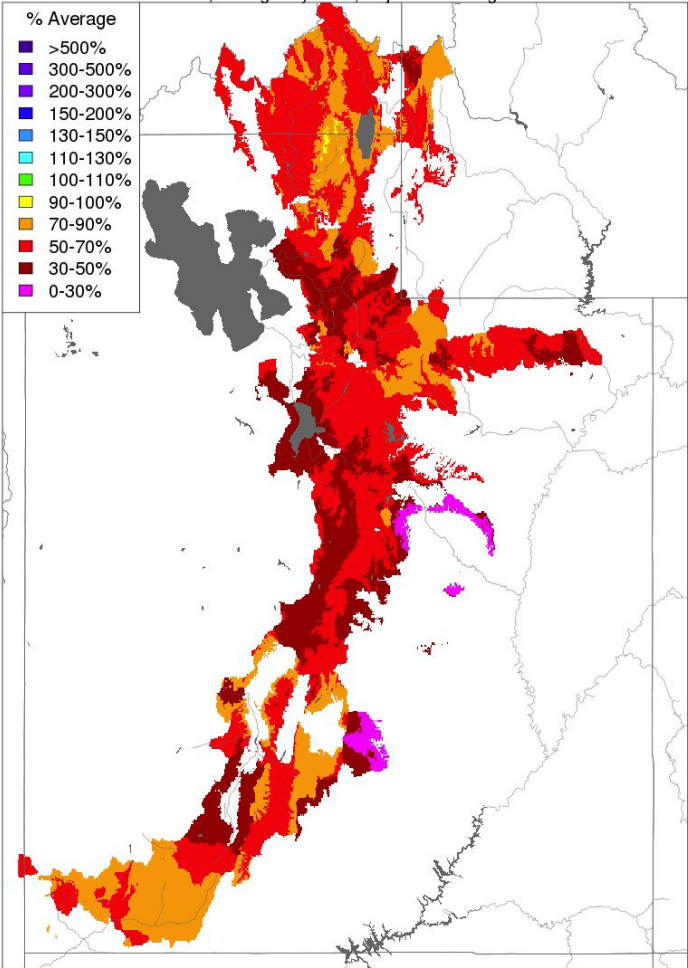


Water Supply Forecasts WY22 - Models Fall Soil Moisture Set

Community Hydrologic Forecast System - DELFT FEWS NWS Model



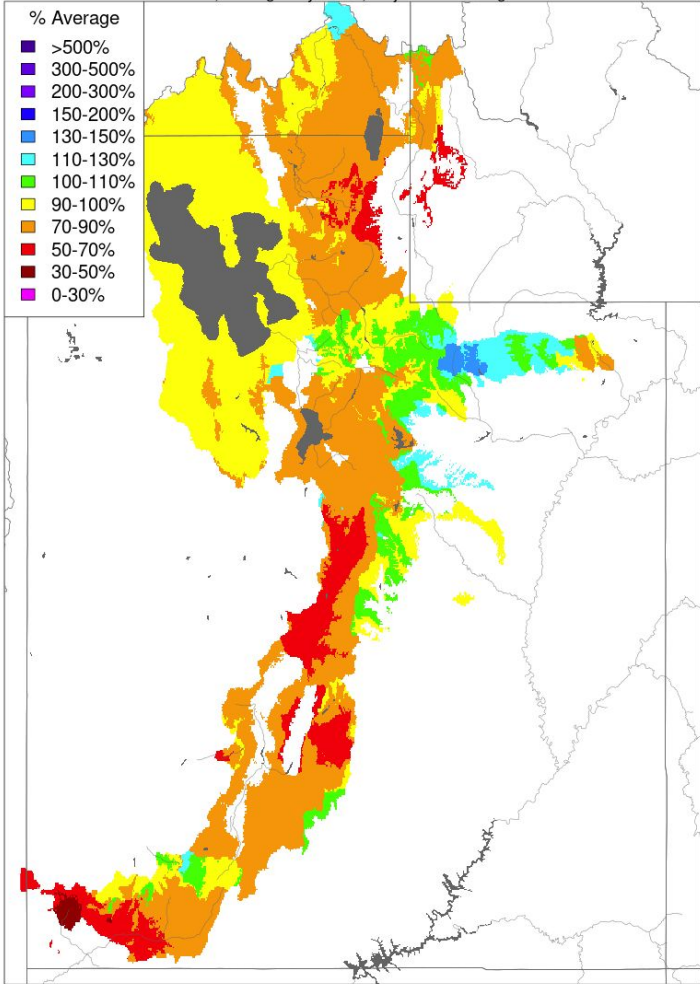
Soil Moisture - Fall - 2020 (November 15)
Modeled, Averaged by Basin, Major Contributing Areas



2020

Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

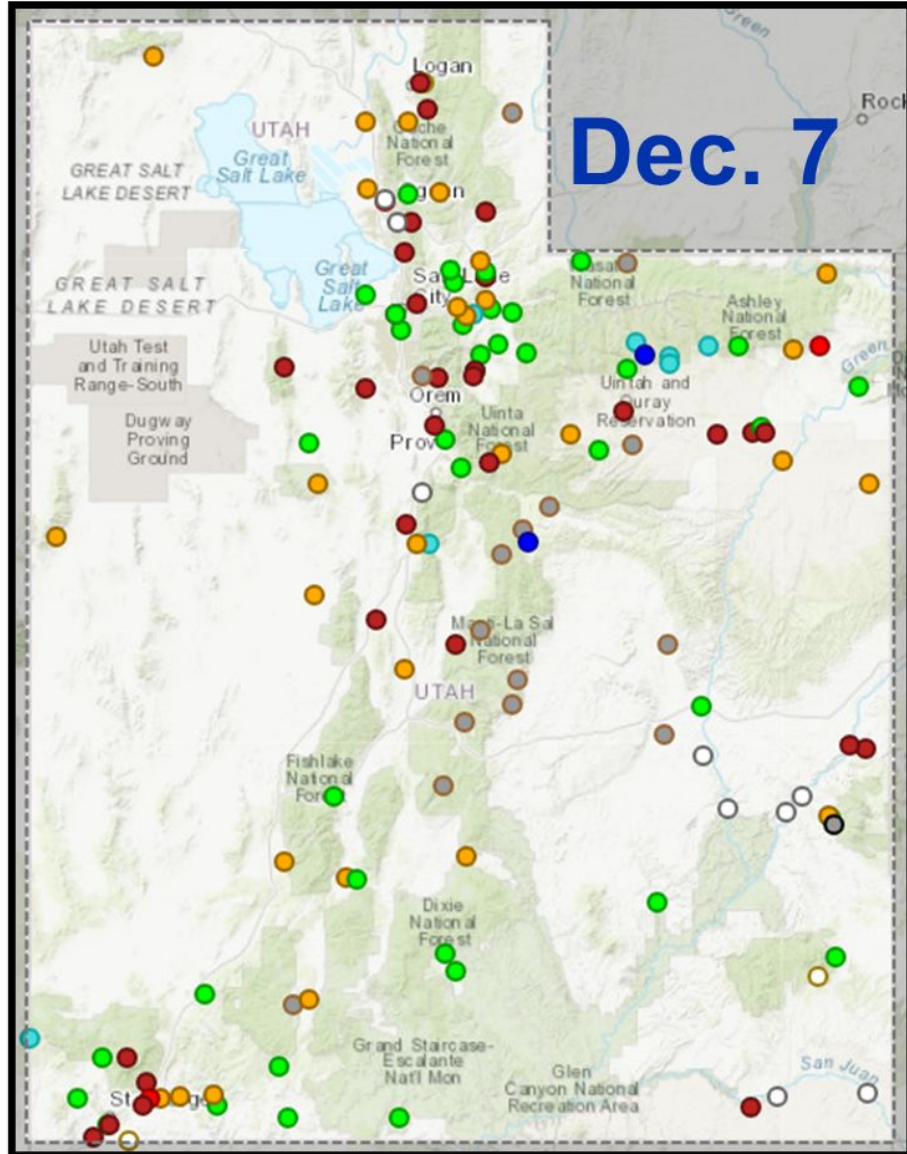
Soil Moisture - Fall - 2021 (November 15)
Modeled, Averaged by Basin, Major Contributing Areas



2021

Prepared by NOAA, Colorado Basin River Forecast Center
Salt Lake City, Utah, www.cbrfc.noaa.gov

Current Streamflow Conditions

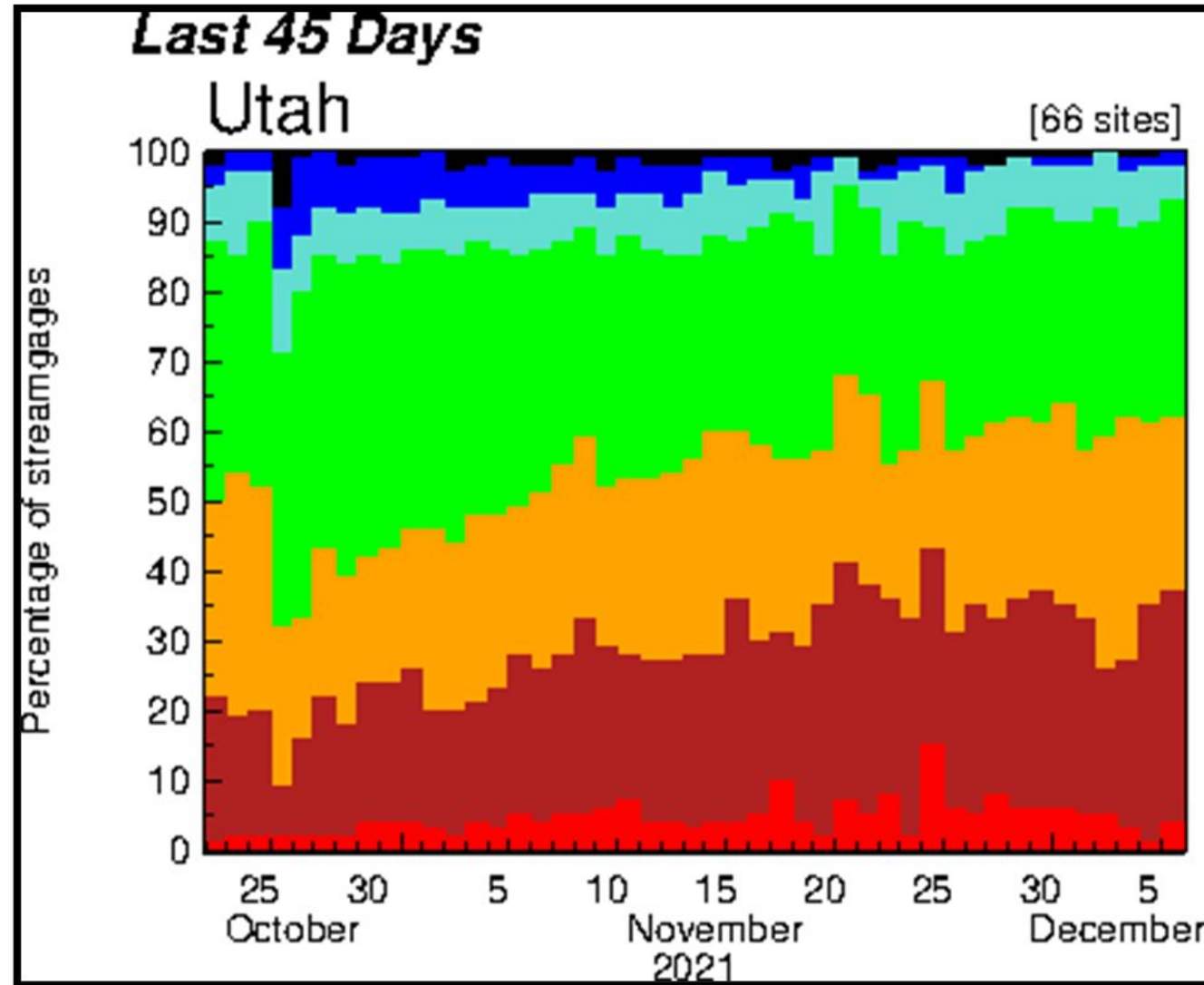


Day-of-Year Status	# Gages	% Gages
All-time high for this day-of-year	0	0.0%
Much above normal for this day-of-year	2	1.5%
Above normal for this day-of-year	7	5.1%
Normal for this day-of-year	39	28.5%
Below normal for this day-of-year	28	20.4%
Much below normal for this day-of-year	30	21.9%
All-time low for this day-of-year	3	2.2%
Not ranked - insufficient record	10	7.3%
Not ranked - no measurement	13	9.5%
Not ranked - stream not flowing	3	2.2%
Not ranked - no recent measurement	2	1.5%

Streamflow: Status	
●	Above flood stage
●	All-time high for this day (100 th percentile (maximum))
●	Much above normal (>90 th percentile)
●	Above normal (76 th – 90 th percentile)
●	Normal (25 th – 75 th percentile)
●	Below normal (10 th – 24 th percentile)
●	Much below normal (<10 th percentile)
●	All-time low for this day (0 th percentile (minimum))
●	Not flowing
●	Not ranked
●	Measurement flag
●	Recent measurement unavailable

❑ Sites must have at least 10 years of record to be ranked

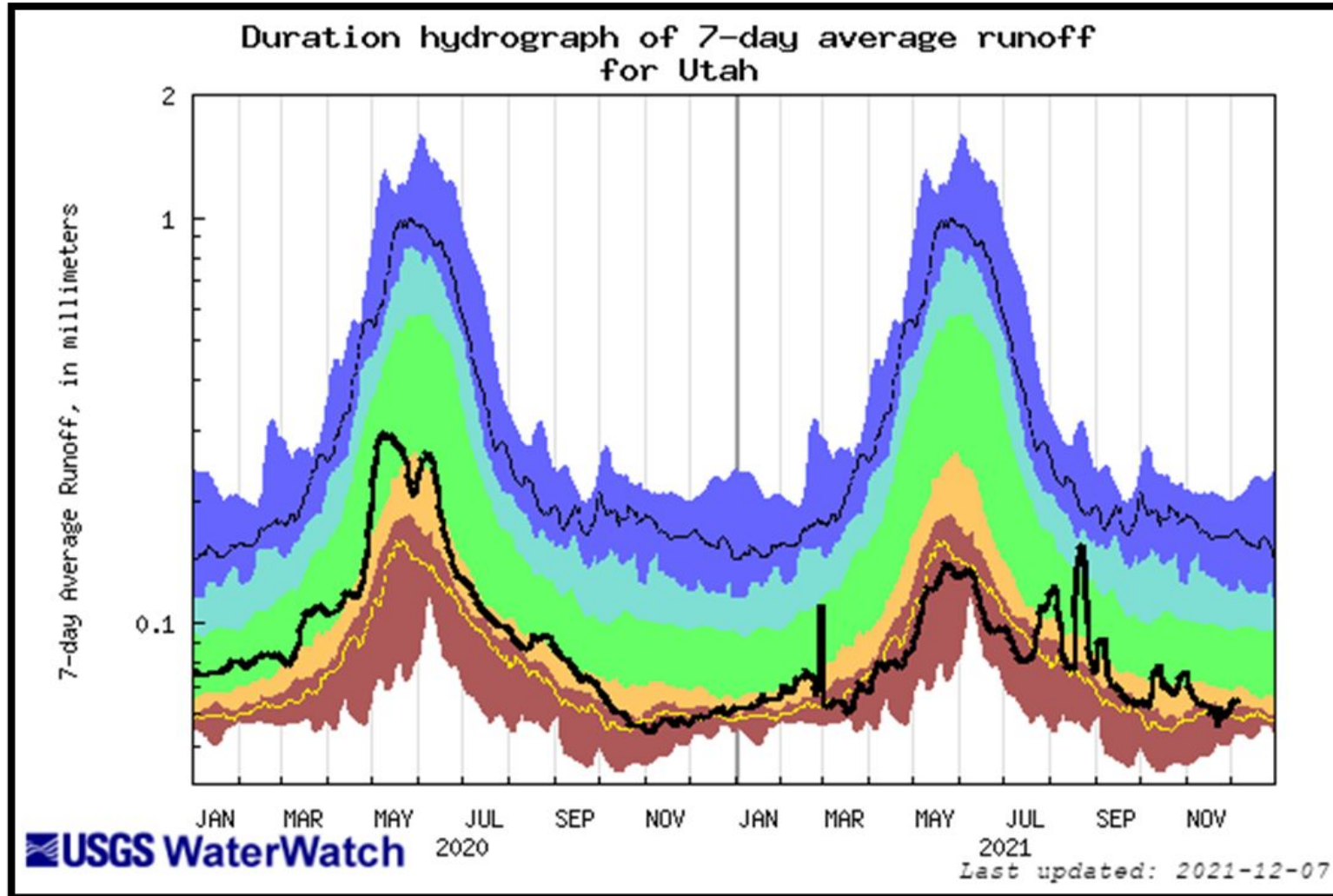
Current Streamflow Conditions



- ☐ Mean daily Streamflow compared to historical streamflow for the day of the year
- ☐ Sites must have at least 30 years of record to be ranked

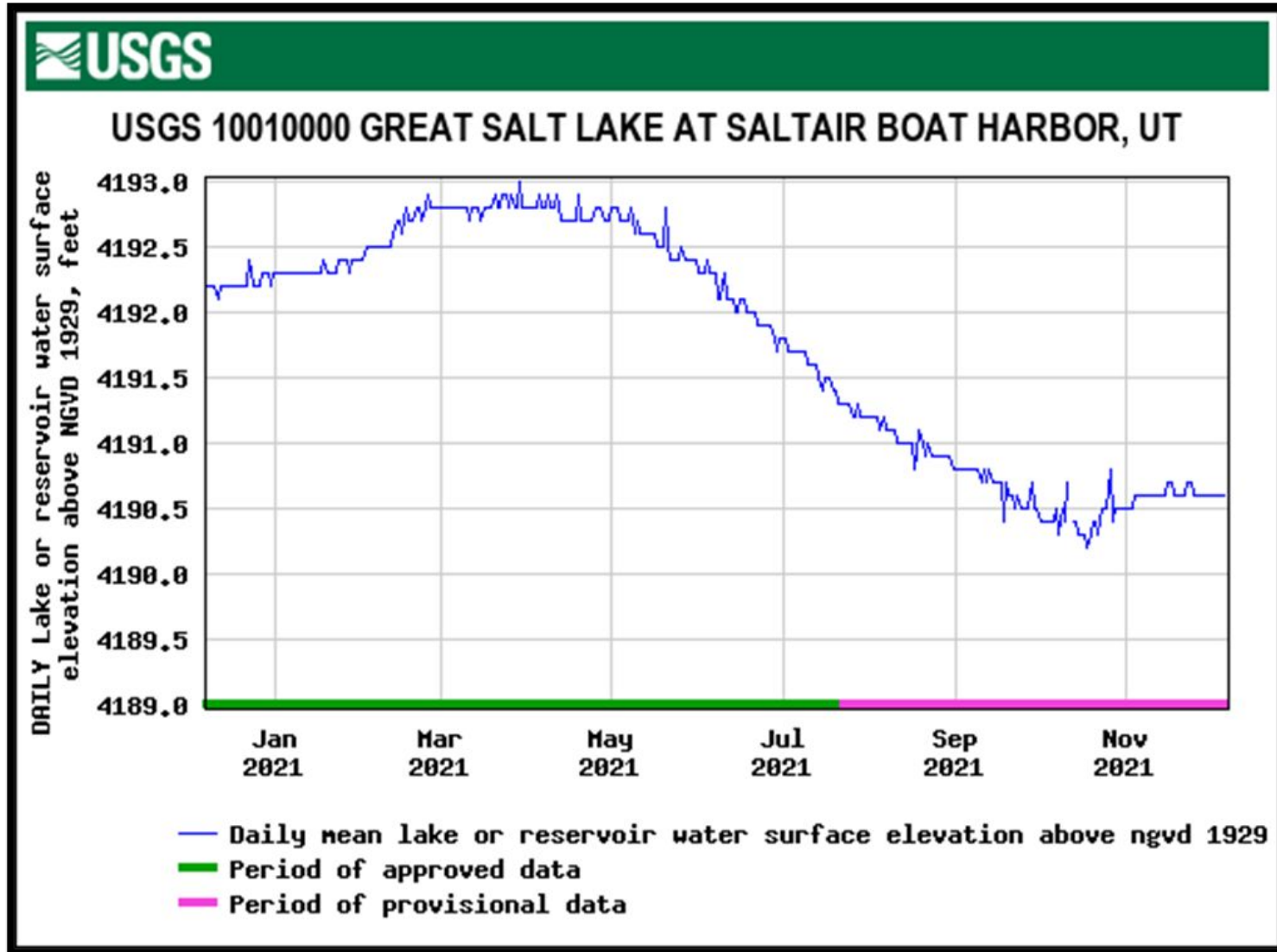
Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

7-Day Average Runoff for Utah



Explanation - Percentile classes						
lowest-10th percentile	5	10-24	25-75	76-90	95	90th percentile - highest
Much below Normal	Below normal	Normal	Above normal	Much above normal		Runoff

Great Salt Lake Water Surface Elevation

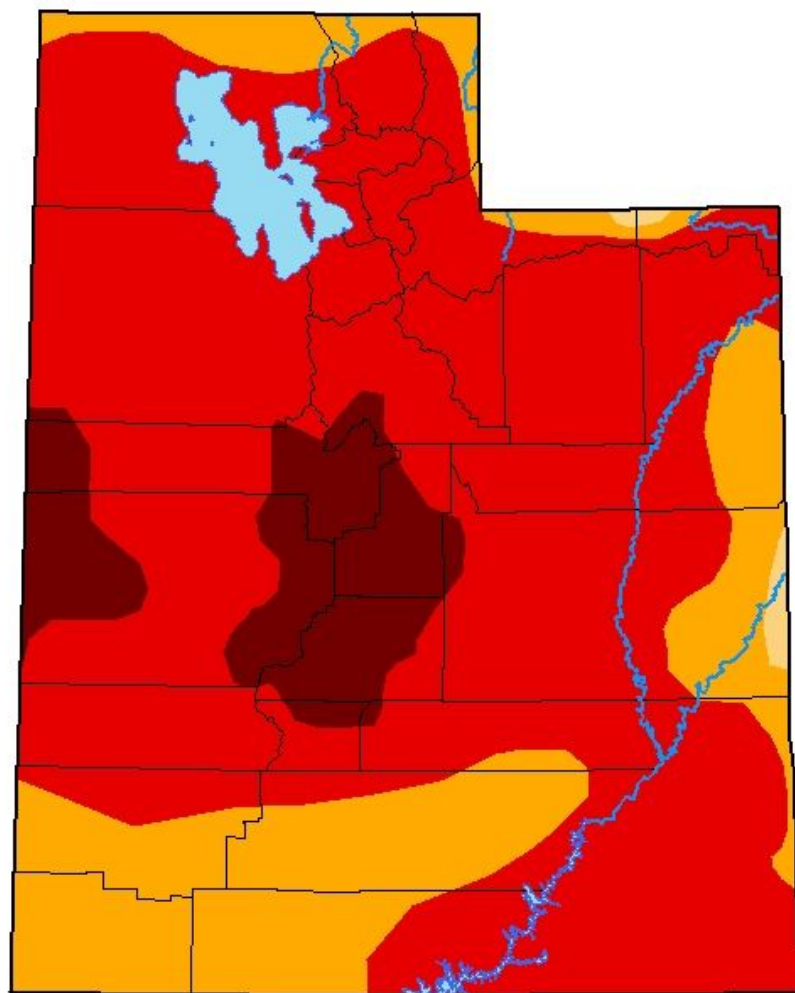


- ❑ Mean daily value
12/6/2021 =
4,190.6'
- ❑ 4,190.2'
10/18/2021
(potential new
historic low)

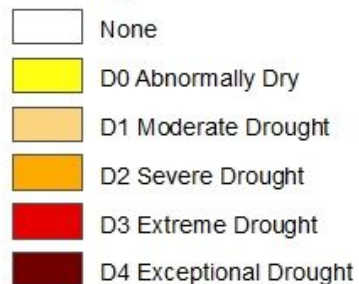
U.S. Drought Monitor

Utah

November 30, 2021
(Released Thursday, Dec. 2, 2021)
Valid 7 a.m. EST



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

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droughtmonitor.unl.edu